

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :	Kimihiro Mabuchi et al.	Art Unit :	1797
Serial No. :	10/582,052	Examiner :	Marjorie Ellen Christian
Filed :	November 22, 2006	Conf. No. :	2047
Title :	BUNDLE OF SELECTIVELY PERMEABLE POLYSULFONE-BASED HOLLOW FIBER MEMBRANES AND PROCESS FOR MANUFACTURING SAME		

EXHIBIT A

CERTIFICATE OF MAILING BY EFS-WEB FILING

I hereby certify that this paper was filed with the Patent and Trademark Office using the EFS-WEB system on this date: September 09, 2009

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August 21, 2009

Examiner Marjorie E. Christian
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Re: BUNDLE OF SELECTIVELY PERMEABLE POLYSULFONE-BASED
HOLLOW FIBER MEMBRANES ...

Application No.: 10/582,052
Our Ref.: 19461-0004US1

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Dear Examiner Christian:

Thank you for granting a telephone interview, scheduled for August 25, 2009 at 10:30 AM, to discuss issues raised in the advisory action and earlier office actions. This letter outlines what we would like to discuss with you during the interview. We plan to focus our discussion on independent claim 1.

Claim 1 recites a plurality of selectively permeable polysulfone-based hollow fiber membranes in which, among others, the content of a hydrophilic polymer (e.g., polyvinyl pyrrolidone (PVP)) in the outer surface of the hollow fiber membrane is 25 to 50 mass %.

In the final office action, claim 1 was rejected as obvious from Fuke in view of Nakagawa and Kozawa. We pointed out in the reply filed on July 20, 2009 that Fuke describes using the internal surface of its hollow fiber membrane to contact blood and that the PVP content in the internal surface of its membrane is 30 to 45% by weight. See page 6 in the reply. Thus, given that the PVP content in the entire membrane described in Fuke is at most 10% by weight (see, e.g., the abstract and paragraph [0017] in Fuke), one skilled in the art would readily recognize that the PVP content in the outer surface of Fuke's membrane is significantly lower than 10% by weight, let alone 25 to 50 mass % as recited by claim 1.

The advisory action maintained the obviousness rejection and stated that "[r]ecitation of 'outer' surface refers to the surface being exposed to the outer atmosphere and not another layer of the hollow fiber; Fuke's surface, that contains the predominant amount of PVP, is exposed to blood and therefore is an outer surface." We do not necessarily agree with the above characterization of the membrane described in Fuke. However, in the sole interest of expediting prosecution, we propose to limit claim 1 to a hollow fiber membrane having an inner surface for contacting blood and an outer surface for contacting a dialyzing fluid. Support for this amendment can be found, e.g., in paragraphs [0012] and [0088] of the specification. We believe that this

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Examiner Marjorie E. Christian
August 21, 2009
Page 2

amendment would make it clear that, in a membrane of claim 1, the surface for contacting a dialyzing fluid, not the surface for contacting blood, contains 25 to 50 mass % of a hydrophilic polymer. Thus, claim 1, as amended above, would be patentable over Fuke. As discussed in the July 20, 2009 reply, the other two references, Nakagawa and Kozawa, do not cure the deficiencies in Fuke.

We thank you for your attention and look forward to talking to you.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Tony Zhang', is written over a horizontal line.

Tony Zhang, Ph.D.
Reg. No. L0256

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